CHESSETTE
BY
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This is a two-player program. The chessboard is laid out as follows:

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8 ▢▧▢▧▢▧▢▧
7 ▧▢▧▢▧▢▧▢
6 ▢▧▢▧▢▧▢▧
5 ▧▢▧▢▧▢▧▢
4 ▢▧▢▧▢▧▢▧
3 ▧▢▧▢▧▢▧▢
2 ▢▧▢▧▢▧▢▧
1 ▧▢▧▢▧▢▧▢
  1 2 3 4 5 6 7 8
```
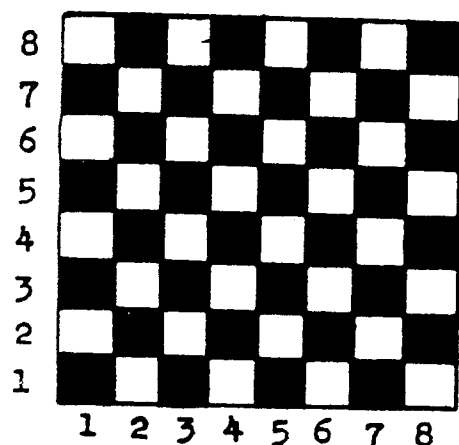
To determine the coordinates of any piece or square, read "right up". For example, the white king begins at square 51. The black queen's pawn begins at square 47.

When the screen displays the prompt "FROM:" enter the square of the piece you wish to move, then press "GO". When the prompt "TO:" appears, enter the square to which you are moving, then press "GO". The computer will complete the move after a few seconds.

EXAMPLE: King's pawn opening by White.

    FROM: 52 (press GO)
      TO: 54 (press GO)

EXAMPLE: King's knight response by Black.

    FROM: 78 (press GO)
      TO: 66 (press GO)

All subsequent moves are entered in a similar manner, with three exceptions.

1. CASTLING. Enter the rook move only, adding a zero after the "TO:" square before pressing GO. This initiates the automatic castling sequence, and the computer will complete the entire move of both pieces.

EXAMPLE: King's side castle by White.

    FROM: 81 (PRESS GO)
      TO: 61Ø (press GO)

EXAMPLE: Queen's side castle by Black.

    FROM: 18 (press GO)
      TO: 48Ø (press GO)

2. EN PASSANT.

Enter the move as though the taking pawn was moving to the square occupied by the taken pawn. This initiates the automatic en passant sequence, and the computer will complete the entire move stepping behind the taken piece in the correct manner.

EXAMPLE: Fifth rank White king's pawn captures fourth rank Black queen's pawn after its initial two-square option.

    FROM: 55 (press GO)
      TO: 45 (press GO)

the computer will actually move the above white pawn to square 46 and will erase the black pawn at square 45; the correct sequence.

3. PAWN PROMOTION. As soon as the computer sees that you are moving a pawn to your opponent's back rank, it will ask : "CHOICE?" before completing the move . Enter the rank and color of the piece to which you are promoting the pawn. Negative numbers are white, positive numbers are black. Ranks are as follows:

WHITE		BLACK	
Pawn:	-1	Pawn:	1
Knight	-2	Knight	2
Bishop	-3	Bishop	3
Rook	-4	Rook	4
Queen	-5	Queen	5
King	-6	King	6

Obviously you cannot promote to a pawn (-1,1) or a king (-6,6), but the computer will not reject illegal entries. We assume, however, that your opponent will object strenuously!

The usual promotion is to queen or knight.

EXAMPLE: White pawn to promote to White queen:

    FROM: 57 (press GO)
      TO: 58 (press GO)
  CHOICE: -5 (press GO)

The computer will complete the sequence.

ERRORS AND HANDICAPS

You can correct most errors simply by taking another turn and moving the piece back to where it came from. Suppose, however, that your error caused you to capture another piece. That piece has been

removed from the board and must be rep-
laced. Enter the following:

    FROM: Ø (press GO)
      TO: Ø (press GO)

The screen will clear and a dimensioned
array of the memory will appear, showing
the colors and ranks of all the pieces
in their current positions on the board.
Empty squares are indicated by zero.

The board is stored in string memory,
strings 1 through 64. The strings are
arranged as follows:

```
8   16   24   32   40   48   56   64
7   15   23   31   39   47   55   63
6   14   22   30   38   46   54   62
5   13   21   29   37   45   53   61
4   12   20   28   36   44   52   60
3   11   19   27   35   43   51   59
2   10   18   26   34   42   50   58
1    9   17   25   33   41   49   57
```

You may now HALT the program and change
any string location to any value you
wish, or erase pieces by changing the
value of the string location to zero.

For example, the White queen (15) is
stored in string @(25) above. You can
handicap White by a queen by HALTing the
program and entering : @(25)=Ø;GOTO 61
then pressing GO. The screen will clear,
the board and pieces will reappear, but
the White queen will be gone.

You can use the same procedure to change
any piece to any other piece, or to re-
place missing pieces or correct mistakes
or to set up chess problems or demonstr-
ations. Just remember to type GOTO 61
and press GO. This will return the board
with your corrections but without chang-
ing the locations of any other pieces.

To return to the board from the memory
display diagram, simply press any key.
The board will reappear with all the
pieces in their correct places.

Load and RUN the CHESSETTE program. A
chessboard will appear on the right of
the screen, and the pieces will be placed
in their starting positions.

```
1 .CHESSETTE
2 .BY C.J. ANDERSON
5 NT=Ø; GOTO 1ØØ
1Ø A=Ø;FOR B=ØTO 7ØSTEP 1Ø;FOR C=-35TO 3
   5STEP 1Ø
11 A=A+1
12 IF @(A)=@(A+64)GOTO 16
13 W=1;IF @(A)>ØW=2
14 X=B;Y=C;GOSUB 2Ø+ABS(@(A))
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15 @(A+64)=@(A)
16 NEXT C
17 NEXT B;BOX -45,Ø,7Ø,8Ø,2
18 GOTO 13Ø
2Ø BOX X,Y,8,8,(PX(X,Y+4)+3)÷2;BOX X,Y,
   8,8,3;RETURN
21 U=8;V=8;GOSUB 5Ø;W=3;U=4;V=4;GOSUB 5
   Ø;Y=Y+2;U=2;V=1;GOSUB 5Ø;Y=Y-2;RETUR
   N
22 GOSUB 4Ø;X=X-2;Y=Y-2;U=2;V=2;GOSUB 5
   Ø;RETURN
23 GOSUB 4Ø;U=4;V=2;GOSUB 5Ø;U=2;V=4;GO
   SUB 5Ø;RETURN
24 GOSUB 4Ø;Y=Y+2;U=2;V=2;GOSUB 5Ø;RETU
   RN
25 GOSUB 4Ø;Y=Y+1;U=4;V=4;GOSUB 5Ø;U=2;
   GOSUB 5Ø;RETURN
26 GOSUB 4Ø;Y=Y+1;U=6;V=4;GOSUB 5Ø;U=2;
   GOSUB 5Ø;U=4;V=2;GOSUB 5Ø;RETURN
4Ø U=8;V=8;GOSUB 5Ø;W=3;U=6;V=6;GOSUB 5
   Ø;RETURN
5Ø BOX X,Y,U,V,W;RETURN
6Ø CLEAR ;FOR J=8TO 1STEP -1;FOR K=JTO
   64STEP 8;PRINT #2,@(K),,;NEXT K;PRINT
    ;NEXT J;PRINT ;PRINT "PRESS ANY KEY
   TO RETURN ";J=KP
61 FOR J=65TO 128;@(J)=Ø;NEXT J;GOTO 12
   Ø
1ØØ FOR A=1TO 128;@(A)=Ø;NEXT A;FOR A=2T
   O 58STEP 8;@(A)=-1;@(A+5)=1;NEXT A
11Ø @(8)=4;@(16)=2;@(24)=3;@(32)=5;@(4Ø)
   =6;@(48)=3;@(56)=2;@(64)=4;FOR A=1TO
   57STEP 8;@(A)=Ø-@(A+7);NEXT A
12Ø CLEAR ;FOR A=ØTO 6ØSTEP 2Ø;BOX A,Ø,1
   Ø,8Ø,1;NEXT A;FOR A=-35TO 25STEP 2Ø;
   BOX 35,A,8Ø,1Ø,3;NEXT A;BOX 35,Ø,82,
   82,3;GOTO 1Ø
13Ø CY=4;INPUT "FROM:"F," TO:"T
14Ø IF F=ØIF T=ØGOTO 6Ø
15Ø B=T;IF T>88T=T÷1Ø
16Ø F=F-(8+(F÷1Øx2));T=T-(8+(T÷10x2))
17Ø IF B<89GOTO 2ØØ
18Ø @(T)=@(F);@(F)=Ø;IF T<F@(T+8)=@(T-8)
   ;@(T-8)=Ø;GOTO 1Ø
19Ø @(T-8)=@(T+8);@(T+8)=Ø;GOTO 1Ø
2ØØ IF ABS(@(F))#1GOTO 25Ø
21Ø IF ABS(F-T)#8GOTO 25Ø
22Ø @(T)=@(F);@(F)=Ø
23Ø F @(T)=1@(T-1)=1;@(T)=Ø;GOTO 1Ø
24Ø @(T+1)=-1;@(T)=Ø;GOTO 1Ø
25Ø IF ABS(@(F))=1IF (T÷8x8=T)+((T+7)÷8x
   8=T+7)INPUT "CHOICE?"A;@(F)=Ø;@(T)=A
   ;GOTO 1Ø
26Ø @(T)=@(F);@(F)=Ø;GOTO 1Ø
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NOTE: This issue does not contain the
usual amount of programs and hardware
information due to all the good news
out of Astrovision. January issue will
make up for this lack !!!